National Materials Program Pilot Projects

CRCPD Conference

Special Interest Meeting

May 5, 2003

Agenda

- Introductions
- Meeting objectives
- General status of National Material Program activities
- Overview of pilot projects
- Discussion
- Closing remarks

Meeting Objectives

- Provide description and status of pilot projects
- Provide opportunity for interested parties to comment and ask questions on pilots
- Solicit specific input on each pilot from interested parties

Major Milestones
Completed

- Selected pilot project chairs (Oct 2002)
- Developed Implementation Plan (Jan 2003)
- Established working groups (Feb 2003)
- Finalized charter for each pilot (Mar 2003)
- Updated NMP web site http://www.hsrd.ornl.gov/nrc/materials.htm (Apr 2003)

Major Milestones

Upcoming

- Complete detail work product plans (May 2003)
- Complete the pilots (Apr 2004)
- Evaluate pilot results against success criteria in SECY-02-0074 (Apr 2004)
- Prepare assessment for the Commission (Nov 2004)

National Materials Program Pilot Project 1:

Establishment of Priorities

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Objective

To develop a collaborative process for NRC and Agreement States to identify priorities and develop work products

Work Products

Develop a process that NRC and Agreement States use to establish priorities

Develop a National Priority list

Examine processes to determine what work will be done and how that work will be shared by NRC and individual Agreement States

Current Activities

- Finalize Work Product Plan
- Researching the current processes utilized by NRC and Agreement States to set priorities

Focus Questions

- Does your State use a formal process to set priorities?
- If so, what is the process?

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National Materials Program Pilot Project 2:

A National Industrial Radiographer Certification Program

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Objective

G-34 Committee on Industrial Radiography as lead group for the oversight of all activities associated with a national industrial radiographer certification program

Certification Oversight Activities

- Review and approval of initial applications to be recognized as certifying entities
- Review of certification program changes
- Follow-up evaluations of certification program status
  - Test administration
  - Program maintenance activities

Focus Question

- How do *you* think the recognized certifying entities should be evaluated?

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Scope of Activities

- Formalize initial review criteria and process based on nationally-accepted standards
  - 10 CFR Part 34 for RAM
  - Part E (SSRCR) for X-Ray
- Apply the criteria and the process for obtaining approval as a certifying entity

Work Products

- CRCPD Document:
  - Formalized criteria and process
  - Proposed strategies for follow-up program evaluations
- Evaluate and document the results of applying the criteria and process in a test case

  Choose one of these 3 options for evaluation:
  - A new certifying entity's application and proposed program
  - ASNT's existing program
  - A volunteer state with an existing certifying program

Schedule

- Charter and Work Product Plan submitted
- Finalize criteria and review process, June 2003
- Evaluate the application of the criteria and process, December 2003
- Complete draft pilot project reports and products, February 2004

National Materials Program Pilot Project3:

OPERATING EXPERIENCE EVALUATION

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Objectives

- Optimize the common use of operating experience information from licensed facilities
- Test a structured process for evaluating cumulative data and performance
- Develop strategies to make the process more transparent
- Produce consistent results when implemented by NRC or Agreement States

What do we Mean by Operating Experience?

- Domestic and foreign event data
- Inspections, special studies, and generic reviews
- Industry-wide analyses
- Risk insights and metrics
- Performance indicators and associated thresholds for regulatory action

Scope of Activities

- Examine the evaluation process used to identify generic issues and possible regulatory action
- Identify gaps in NRC and Agreement State processes and opportunities for improvement
- Consider process for providing the Commission information on significant nuclear materials issues and adverse licensee performance

Scope of Activities-continued

- Develop tools and metrics to test the use of cumulative data, a standard format, and decision criteria
- Examine lessons learned from past operating experience and associated root causes, risk insights, and corrective actions

Proposed Regulatory Framework

- Propose enhancements to procedures, organizational review and evaluation methods, sources of information, and methods to better communicate operating experience information

- Provide recommendations to enhance the efficiency and effectiveness of materials oversight programs, including matters related to duplication of effort and burden reduction

Focus Questions

- How can operating experience information be better communicated between NRC and Agreement States?
- How can operating experience information and trending optimize NRC and Agreement State resource utilization?
- How can risk insights be better integrated into regulatory decision making?

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National Materials Program Pilot Project 5:

Implementation of Phase II Recommendations
NRC Inspection Manual,
Temporary Instruction 2800/033,
Revised Materials Inspection Program

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Phase I and II Reports

- The Phase I Report (11/00) identified specific recommendations for materials licensing & inspection programs

- Phase II (8/01) resulted in staff initiatives, benchmarking with other federal agencies, National Materials Working Group, and specific recommendations for changes to the Materials Inspection Program

Phase II Recommendations for IMC 2800

The following were selected as “quick hits”:

- II-5 Revise inspection priorities
- II-9 Empower inspectors
- II-10 Streamline inspection preparation
- II-11 Revise initial inspections
- II-12 Revise field office inspections
- II-16 Expand the use of NRC Form 591

7 Risk-Informed Focus Elements

INSPECTION PROCEDURES

- 1) Security and control of licensed material;
- 2) Shielding of licensed material;
- 3) Comprehensive safety measures;
- 4) Radiation dosimetry program;
- 5) Radiation instrumentation and surveys;
- 6) Radiation safety training and practices; and
- 7) Management oversight

How do These Changes Affect the Inspection Process

- Inspection remains a performance-based evaluation of licensee activities rather than a review of records
- Changes were instead made in the preparation and documentation of inspections
- Evaluation of data generated to date has indicated 14 % FTE reduction overall for the materials inspection program

Revised Materials Inspection Program--Next Steps

- 2002-03, NRC field testing
  - Revised IMC 2800
  - 12 Inspection Procedures
  - Preliminary Analyses
- 2003
  - Summer, Final Analysis
  - Fall, Final Versions of IMC 2800 and 12 IPs
- 2004
  - NMP-Pilot Project Final Report

Focus Questions

- What risk-informed or performance-based changes have been implemented in Agreement State materials inspection programs?
- What inspection data analyses have been completed to measure effectiveness and efficiency of Agreement States materials inspection programs?